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REMARKS

Amendments to the claims

Claims 1-11 and 14-30 are pending in the application.

The language of claim 1 has been clarified to recite "A computer-readable <u>medium</u> memory storing an electronic certificate <u>data structure</u>, the <u>data structure</u> comprising:

content data specifying an attribute delegation from an identified issuer to a certificate subject, and

an electronic signature of said issuer for confirming the content data;

wherein the content data includes including a condition requiring that a particular subject must have a particular attribute in order for the delegation to be valid".

The language of dependent claims 2-10 has been amended consistently to recite a "computer-readable medium memory".

The language of claims 11 and 18-30 has been amended consistently to recite a "certificate <u>data structure</u>".

No new matter has been added.

Rejections under 35 U.S.C. 112

Claims 1-11 and 14-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Applicant respectfully disagrees.

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Claims 1-10

Claim 1 and dependent claims 2-10 stand rejected for reciting a memory device storing an electronic certificate that is not believed to be a data structure since no data structure has been recited. The Applicant notes that claim 1 has been amended to recite a "computer-readable medium storing an electronic certificate data structure", and submits that claim 1 as amended complies with 35 U.S.C. 112, and in particular distinctly claims the statutory patentable matter of functional descriptive material (electronic certificate data structure) structurally and functionally interrelated to the computer-readable medium on which it is recorded. The Applicant further submit that in view of the above, claims 2-10 as amended also comply with 35 U.S.C. 112. Accordingly, the Applicant respectfully requests the Examiner to withdraw this rejection.

Claim 11 and 14-18

Claim 11 and dependent claims 14-18 stand rejected for reciting an apparatus for generating an electronic certificate, having features that fail to distinguish from the prior art in terms of structure rather than function. The Applicant notes that claim 11 as amended recites an "apparatus for generating an electronic certificate data structure", and notes that MPEP 2106(R2)IV, B(2)(a) states that a statutory product claim may define a useful machine by identifying the physical structure of the machine in terms of its hardware or hardware and software combination (See, e.g., Lowry, 32 F.3d at 1583, 32 USPQ2d at 1034-35; Warmerdam, 33 F.3d at 1361-62, 31 USPQ2d at 1760). The Applicant respectfully submits that amended claims 11 and 14-18 define a useful machine that may be implemented by a hardware and software combination (computer and appropriate programming as noted by the Examiner) or, as is well known in the art, by equivalent dedicated hardware. The Applicant submits that either the hardware and software combinations (software structurally and functionally interrelated to the hardware on which it is implemented) or the equivalent dedicated hardware recited in claims 11 and 14-18 structurally distinguish over the hardware and software combination or the equivalent hardware of the prior art. Accordingly, the Applicant respectfully requests the Examiner to withdraw this rejection.

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Claims 19-30

Claims 19 and 25, as well as dependent claims 20-24 and 26-30, stand rejected for reciting a reduction engine. A for claim 11 above, the Applicant respectfully submits that claims 19-30 as amended define useful machines that may be implemented by a hardware and software combination (computer and appropriate programming) or by an equivalent dedicated hardware. The Applicant submits that either the hardware and software combination or the equivalent dedicated hardware recited in claims 19-30 structurally distinguish over the hardware and software combination or the equivalent hardware of the prior art. Accordingly, the Applicant respectfully requests the Examiner to withdraw this rejection.

Rejections under 35 USC 103

Claims 1-9, 11, 14-17, 19-23 and 25-29 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over Applicant's admitted prior art (aapa). The Applicant respectfully disagrees.

Claim 1

The examiner asserts, page 4 of the Action, that "a condition in aapa is that the particular party must be able to respond to the challenge-response transaction by knowing the key pair used to encrypt the data".

The Applicant notes that the prior art certificate has a specified certificate subject (SUBJECT in Figure 2) to whom a specified particular attribute (AUTHORISATION) is being passed by the certificate. A party R receiving the prior art certificate accepts that the specified certificate subject now has the particular attribute specified in the certificate (assuming that the party R trusts the party signing the certificate). This acceptance is unconditional.

When a party X claims that the certificate proves that party X has the aforesaid particular attribute, party R can <u>choose</u> simply to accept that party X is the certificate subject, or party R can choose to check the identity of party X (see page 3, lines 4-7 of the specification). Party X can effect this check in many ways, one of which is by

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effecting a challenge-response exchange. Such a check on the identity of party X is a completely separate issue from what attribute delegation is effected by the certificate.

The aapa certificate does not <u>require</u> the certificate subject to prove its identity (by a challenge-response exchange), this merely being at the discretion of the party receiving the certificate. The "subject" public key in the aapa certificate merely implicitly corresponds to a condition <u>indicating</u> that a particular subject <u>can</u> have a particular attribute (possess the private key matching the subject public key) in order for the delegation (the certificate overall) to be valid. However, in aapa, the certificate may be valid even if the subject does not have the particular attribute (if the receiving party does not check the attribute).

Accordingly, aapa fails to disclose or suggest a "condition requiring that a particular subject must have a particular attribute in order for the delegation to be valid", as recited in claim 1. At least in view of the above, the applicant submits that claim 1 is patentable over aapa.

Claim 11

The above arguments can be used to show that aapa fails to disclose or suggest an apparatus as recited in claim 11, and in particular comprising a data handling arrangement for "including a condition requiring that a particular subject must have a particular attribute in order for the delegation to be valid". At least in view of the above, the applicant submits that claim 11 is patentable over aapa.

Claim 19

The above arguments can be used to show that aapa fails to disclose or suggest a reduction engine as recited in claim 19, and in particular comprising a trust-chain branch control arranged to "require the trust-chain verifier to establish a branch of said trust chain upon the trust-chain verifier using in the trust chain a said attribute delegation that is justified on the basis of a conditional said certificate data structure that includes in its content data a condition requiring that a particular subject must have a particular attribute in order for the delegation justified by the certificate to be valid". At least in view of the above, the applicant submits that claim 19 is patentable over aapa.

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Claim 25

The above arguments can be used to show that aapa fails to disclose or suggest a trust chain discovery engine as recited in claim 25, and in particular comprising a trust-chain branch control arranged to "require the trust-chain builder to seek to build a branch of said trust chain upon the trust-chain builder using in the trust chain a said attribute delegation that is justified on the basis of a conditional said certificate data structure that includes in its content data a condition requiring that a particular subject must have a particular attribute in order for the delegation justified by the certificate to be valid". At least in view of the above, the applicant submits that claim 25 is patentable over aapa.

Claims 2-9, 14-17, 20-23 and 26-30

Claims 2-9 depend directly or indirectly on claim 1; claims 14-17 depend directly or indirectly on claim 11; claims 20-23 depend directly or indirectly on claim 19; and claims 26-30 depend directly or indirectly on claim 25. The Applicant respectfully submits that at least in view of their dependency on claims 1, 11, 19 or 25, claims 2-9, 14-17, 20-23 and 26-30 are patentable over aapa.

Objections to the claims

Claims 10, 18 and 24 stand objected to as being dependent upon a rejected base claim. The Applicant respectfully submits that it has been shown above that claims 1, 11 and 19, on which claims 10, 18 and 24 depend, are patentable over aapa. Accordingly, the Applicant respectfully requests the Examiner to withdraw this objection.

* * *

The Applicant submits that all claims of the application as amended herein are in condition for allowance. Prompt issuance of a Notice of Allowance is earnestly solicited.

The Commissioner is authorized to charge any additional fees that may be

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required or credit overpayment to deposit account no. 08-2025. In particular, if this response is not timely filed, then the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136 (a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 08-2025.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 on

August 8, 2005 (Date of Deposit)

Shannon Tinsley
(Name of Person Depositing)

Signature

August 8, 2005

Date

Respectfully submitted,

Robert Popa

Attorney for Applicant

Reg. No. 43,010

LADAS & PARRY

5670 Wilshire Blvd., Suite 2100

Los Angeles, CA 90036

(323)934-2300